

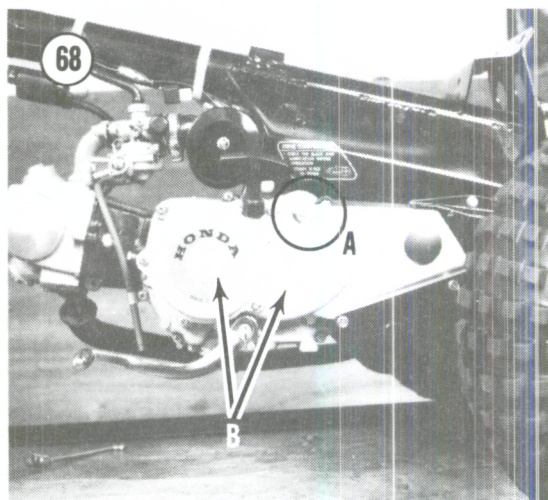
Installation

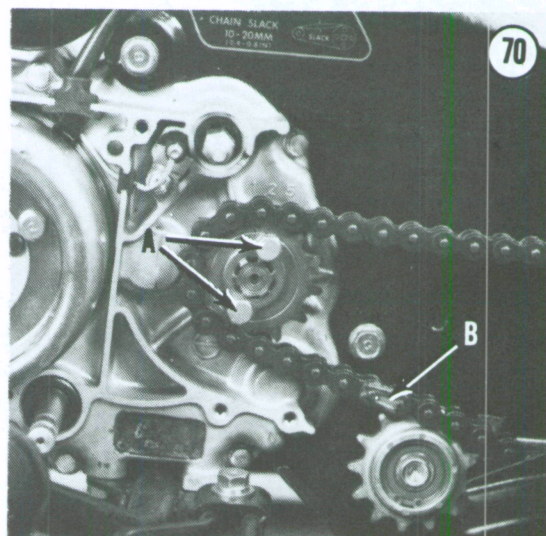
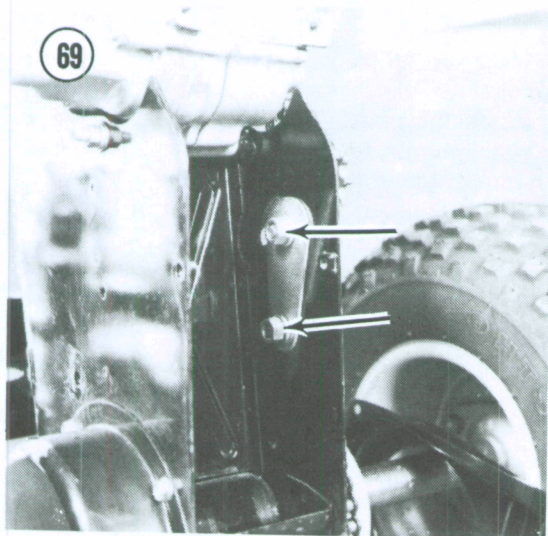
1. Make sure all the pins are installed in the shift drum.
2. Install the gearshift spindle assembly. Make sure the return spring is correctly positioned onto the stopper pin in the crankcase.
3. Engage the gearshift lever portion of the lever into the shift drum pins.
4. Align the recess in the back of the stopper plate with the long pin in the shift drum. Install the stopper plate and tighten the bolt securely.
5. Correctly position the return spring onto the stopper arm. Move the stopper arm into position and tighten the stopper arm bolt securely.
6. Install the primary driven gear onto the transmission main shaft. From the other side of the engine, push on the main shaft and install the circlip. The main shaft must be pushed on slightly so that the circlip will seat correctly into the groove in the main shaft.
7. Install the clutch assembly as described in this chapter.
8. Refill the engine with the correct type and quantity of oil; refer to Chapter Three.
9. Adjust the clutch as described in Chapter Three.

DRIVE SPROCKET

Removal/Installation (70 cc)

1. Place the ATC on level ground.
2. Remove the seat/rear fender assembly.
3. Remove the bolts securing the under plate and the chain cover (Figure 67).
4. Shift the transmission into NEUTRAL and remove the E-clip and the neutral indicator (A, Figure 68).





5. Remove the recoil starter assembly and left-hand crankcase cover as an assembly (B, Figure 68).

6. Loosen the bolts on the drive chain tensioner (Figure 69).

7. Shift the transmission into any gear. Push the ATC forward until the master link is visible next to the drive sprocket.

8. Have an assistant hold the rear brake on while you loosen the bolts (A, Figure 70) securing the drive sprocket and drive sprocket holding plate.

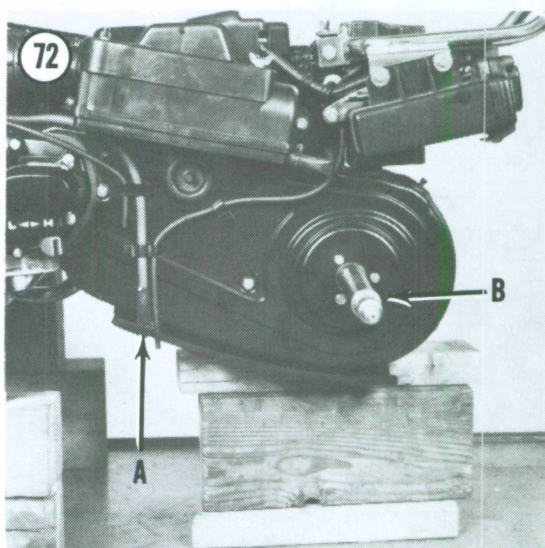
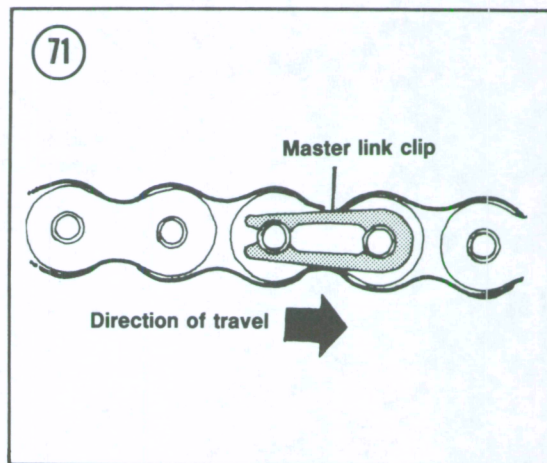
9. Remove the drive chain master link (B, Figure 70).

10. Rotate the holding plate in either direction to disengage it from the splines on the transmission countershaft; slide off the holding plate and drive sprocket.

11. Install by reversing these removal steps, noting the following.

12. Install a new drive chain master link so that the closed end of the clip is facing the direction of chain travel (Figure 71).

13. Adjust the drive chain as described in Chapter Three.



Removal/Installation

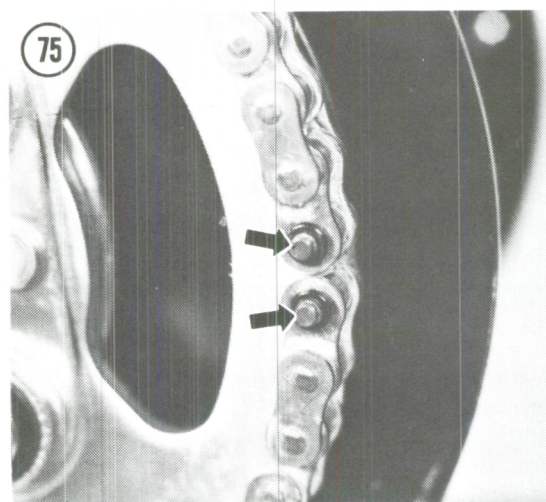
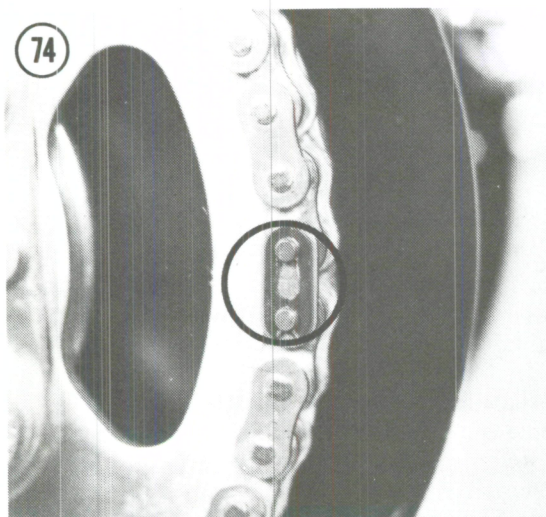
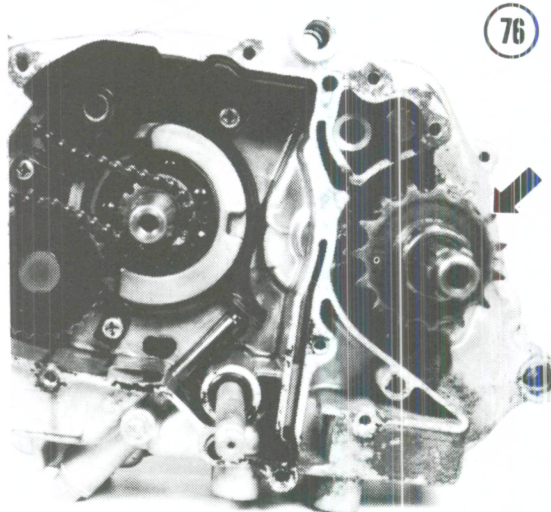
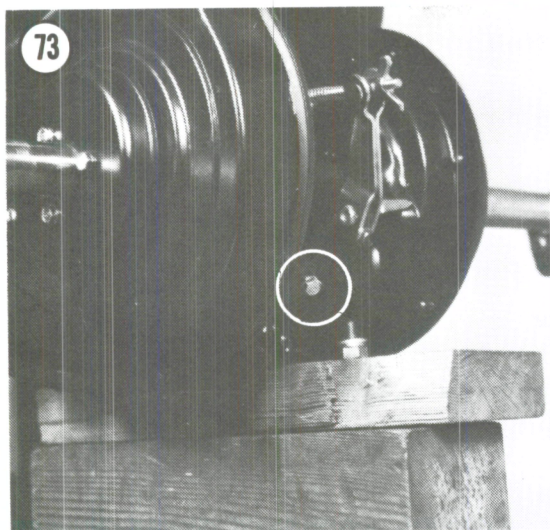
(All 90 and 125 cc; 1979-1980 and 1984 110 cc)

1. Remove the subtransmission as described in this chapter.

2. Remove the left-hand crankcase cover as described in Chapter Four.

3. Loosen the drive chain adjusting nut.

4. Loosen the rear axle bearing holder and move the rear axle forward to allow slack in the drive chain.



5. Remove the left-hand rear wheel and hub as described in Chapter Eight.

6. On ATC125M models, remove the carburetor, crankcase vent and battery vent tubes (A, **Figure 72**) from the drive chain cover.

7. Remove the bolts securing the axle seal cover (B, **Figure 72**) and slide off the cover.

8. Remove the bolts securing the drive chain cover and remove the cover.

NOTE

*On ATC125M models, there is one additional bolt (**Figure 73**) at the rear of the cover.*

9. Remove the drive chain master link (**Figure 74**).

10. On models equipped with O-rings, don't lose the 2 O-ring seals (**Figure 75**) on the link pins.

11. Slide off the sprocket (**Figure 76**) and, on ATC110 and ATC125M models, the bushings.

12. Install by reversing these removal steps, noting the following.

13. On models equipped with O-rings, be sure to install the 2 O-ring seals (**Figure 75**) on the link pins.

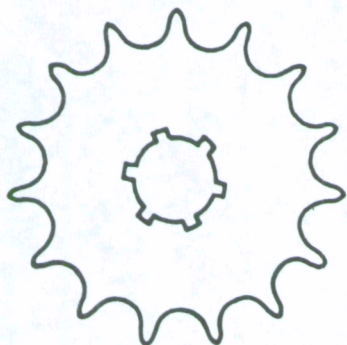
14. Install a new drive chain master link so that the closed end of the clip is facing the direction of chain travel (**Figure 71**).

15. Adjust the drive chain and rear brake as described in Chapter Three.

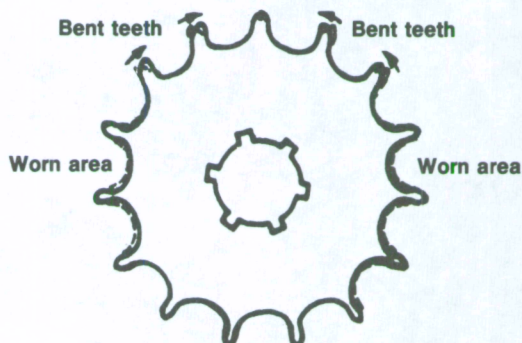
Removal/Installation (1981-1983 ATC110)

The factory equipped drive chain is a continuous loop with no master link. To remove the drive sprocket (as well as the drive chain or rear axle) it

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GOOD



WORN

is necessary to partially disassemble the rear axle. Consider replacing the factory drive chain with an aftermarket type chain equipped with a master link.

1. Remove the recoil starter and alternator as described in Chapter Seven.
2. Remove the subtransmission as described in this chapter.
3. Remove the left-hand crankcase cover as described in Chapter Four.
4. Remove the rear axle, drive chain, drive sprocket and bushings as an assembly as described in Chapter Eight.
5. Install by reversing these removal steps, noting the following.
6. Adjust the drive chain as described in Chapter Three.

Inspection

1. Inspect the teeth on the drive sprocket. If the teeth are visibly worn (Figure 77), replace the sprocket with a new one.
2. If the sprocket requires replacement, the drive chain is probably worn also and should be replaced.
3. On ATC110 and ATC125M models, measure the inside and outside diameter of the drive sprocket bushings. Replace if worn to the following service limit dimensions:
 - a. Inside diameter: 19.94 mm (0.785 in.).
 - b. Outside diameter: 21.90 mm (0.862 in.).

TRANSMISSION AND INTERNAL SHIFT MECHANISM

To gain access to the transmission and internal shift mechanism it is necessary to remove the engine and split the crankcase. Once the crankcase has been split, removal of the transmission and shift drum and forks is a simple task of pulling the assemblies up and out of the crankcase. Installation is more complicated and is covered more completely than the removal sequence.

Refer to **Table 2** for specifications for the internal shift mechanism and **Table 3** for specifications for the transmission components. Honda does not provide specifications for all models.

Different transmissions are used among the various models. They are covered in separate procedures; be sure to use the correct procedure for your specific model.

PRELIMINARY TRANSMISSION INSPECTION (ALL MODELS)

After the transmission shaft assemblies have been removed from the crankcase halves, clean and inspect the assemblies prior to disassembling them. Place the assembled shaft into a large can or plastic bucket and thoroughly clean with a petroleum based solvent such as kerosene and a stiff brush. Dry with compressed air or let it sit on rags to drip dry. Repeat for the other shaft assembly.

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